ERIC Documents Resume | See Instruction Sheet | DATE OF RESUME 10/14/65 | DATE RECEIVED

A. PUBLICATION DATA

1. ERIC NUMBER: ED002267
2. ORIGINATOR CONTROL NO(S).: N.A.
3. IDENTIFICATION NO.: 1956

DO NOT WRITE IN SPACE BELOW

4. AUTHOR(S): Jesser, David L.

5. TITLE OF DOCUMENT ABSTRACTED: Western States Small Schools Project: Summer Workshop 1963

6. PUBLICATION TITLE: N.A.

7. EDITOR(S): N.A.

8. PLACE OF ORIGIN: Department of Education
ORG. tion
ST. State of Nevada
CITY, STATE
TELE. EXT.
INST/LOC CODE

9. PUBLISHER OR SOURCE: Department of Education, State of Nevada

10. VOL.	11. PAGES	12. MO./YR.	13. TOTAL PP.
N.A.	N.A.	1963	58

MICROFILM COPY AVAILABLE: YES ☒ NO ☐

COPYRIGHT GRANTED: YES ☐ NO ☒

COPYRIGHT RELEASE FILED: YES ☐ NO ☐

TYPE OF REPORT: PROPOSAL ☐ IN-PROGRESS ☐ FINAL ☒ FOLLOW-UP ☐

OTHER ERIC REFERENCES:

ERIC SATELLITE CODE

B. INDEXING DATA

14. SUBJECT AREA

15. TYPE OF ENDEAVOR: Conference

16. INDEXING TERMS (6-12)

papers	small schools	team teaching	
workshops	telephone	language	
educational programs	nongraded high school	Western States Small Schools Project (WSSSP)	
	reading		

17. ABSTRACT (MAX. 250 WORDS) The Western States Small Schools Project (WSSSP) is a multistate cooperative endeavor to identify and define ways of strengthening the educational programs in small schools which cannot be consolidated. Summer workshops are held in each State. A summary and report of several WSSSP summer workshops is included.

The workshop schedule consists of lectures by special consultants, discussions, and evening exchange meetings for the groups involved. "A Teacher's Philosophy of Education," by Marie York, summarizes ideals for teacher performance. Discussed are such topics as parent conferences, the method problem, grouping, adapting methods to abilities, remedial teaching, automation, and individual study centers. "The Telephone as a Teaching Tool" describes the limited use of the telephone in the Nevada schools curriculum and explains plans to increase its use. The speaker-phone can be a method to bring outsiders to the small, isolated school. "The Non-Graded High School," by B. Frank Brown, suggests five continuous learning groups from kindergarten through the nongraded college. Education should be experimental, flexible, and unrestrained in order to develop a form compatible with needs. "The Language Experience Approach to Reading," by James Halcomb, describes one staff's efforts to improve the teaching of reading. Children are given equal opportunity to respond to questions which ask for divergent responses. The question "why" can evoke a child's experiences which, in turn, can motivate him in his thinking, talking, writing, and reading. "Improvement of Personnel Utilization," by M. Delbert Lobb, emphasizes the need for teachers to apply new teaching methods and materials which can eliminate the time-lag between discovery and practice.

ERIC No.

18. SOURCE OF ABSTRACT

C. FUNDING DATA

19. SUPPORTING ORGANIZATION

20. DIVISION OR DEPT.

21. CONTRACT NO.

PROJECT NO.

22. TOTAL COST OF PROJECT

23. DURATION OF PROJECT

U.S. Department of Health, Education, and Welfare
Office of Education

2

ERIC Form 1

INSTRUCTIONAL TECHNOLOGY - U.S.C.

1956*

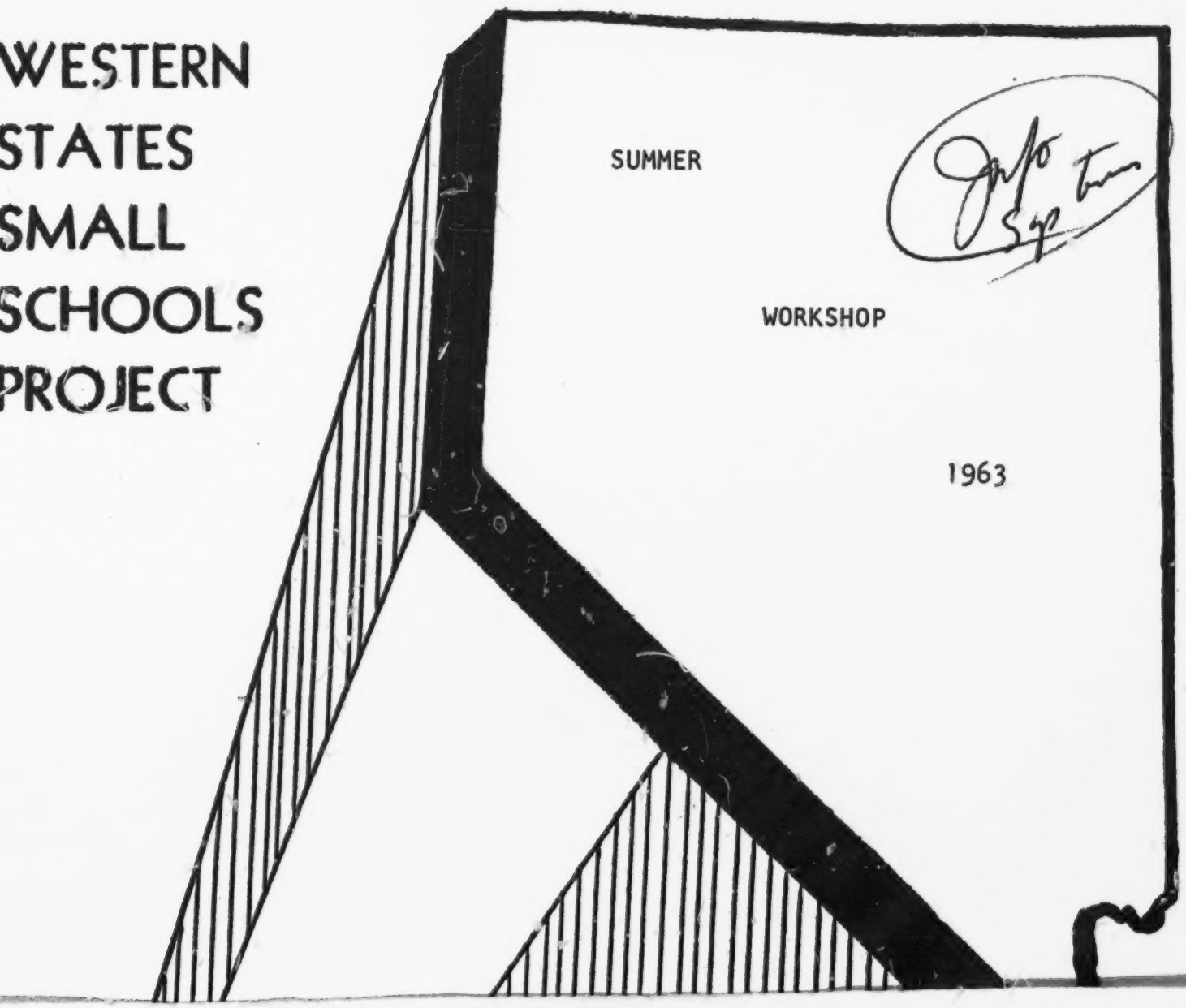
ED002267

WESTERN STATES SMALL SCHOOLS PROJECT

SUMMER

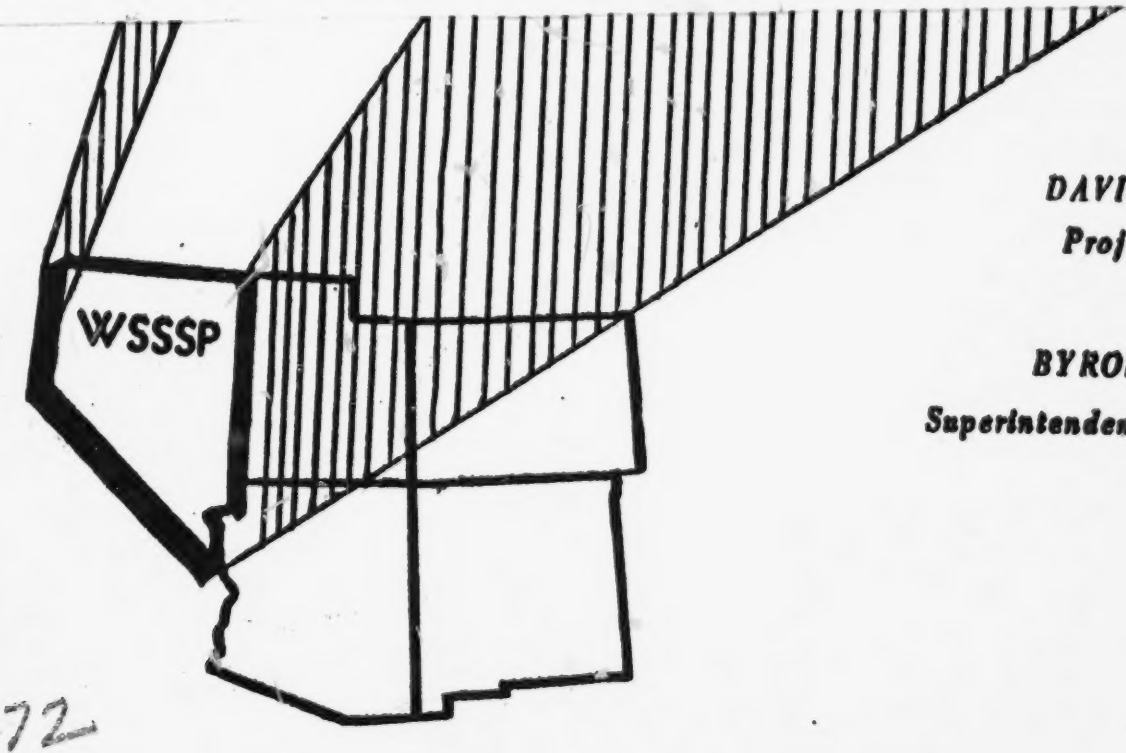
WORKSHOP

1963



REPRINTED BY PERMISSION
U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN PRINTED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.



DAVID L. JESSER
Project Director

BYRON F. STETLER
Superintendent of Public Instruction

DEPARTMENT OF EDUCATION
STATE OF NEVADA

J0272

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
PARTICIPANTS	2
CONSULTANTS	3
DAILY SCHEDULE	4
GENERAL INFORMATION	5
WORKSHOP ACTIVITIES	7
A TEACHER'S PHILOSOPHY OF EDUCATION	15
THE TELEPHONE AS A TEACHING TOOL	23
THE NON-GRADED HIGH SCHOOL	29
THE LANGUAGE EXPERIENCE APPROACH TO READING	37
IMPROVEMENT OF PERSONNEL UTILIZATION	49

INTRODUCTION

The Western States Small Schools Project is a concerted, cooperative endeavor to identify and define ways of strengthening the educational programs in those small schools which must of necessity remain in the educational scene. The project, commonly referred to as the WSSSP, is a multi-state venture, and is made up of Arizona, Colorado, Nevada, New Mexico, and Utah. It is hoped that, during the project's 3-year span of operation, action-research programs in the various participating schools will furnish all necessarily existent small schools with sound guidelines for self-improvement.

As one phase of the program alluded to in the preceding paragraph, summer workshops for participating teachers and administrators are held in each of the several cooperating states. As each participating state is concerned with specific areas of interest, the several workshops may take somewhat different routes, so to speak. However, the ultimate goal for each state and each workshop remains as set forth in the first lines of the opening paragraph above.

What follows is a capsule summary and report of but one of the several WSSSP summer workshops, viz., that for Nevada.

PARTICIPANTS

1963 SUMMER WORKSHOP
WSSSP - NEVADA

Name	School
Leona Aden	Mina
Irene M. Alderson	Imlay
Blaine W. Allan	Virgin Valley
David N. Anderson	Pahranagat Valley
Mary M. Birdzell	Wells
Helen S. Black	Wells
Charles E. Borden	Wells
Alice Campbell	Imlay
Janice M. Catron	Jackpot
Kelton L. Chamberlain	Virgin Valley
Elaine Constant	Barrel Springs
Vernon D. Dowty	Carlin
Kathryn W. Duffin	Lincoln County
Hugh Gallagher	Storey County
Darrell V. Hansen	Jackpot
Lyle Ann Hansen	Jackpot
Aenona T. Harper	Wells
Ronald Harper	Wells
Marian J. Hepworth	Wells
Ruth E. Hereford	Scheelite
Karma Hollingshead	Lincoln County
Margaret Huggins	Wells
E. Wesley Hughes	Virgin Valley
Odetta McGargill	Wells
Kelly Nelson	Utah
Glenn Nutting	McDermitt
Larry G. Olsen	Lincoln County
Jerry Pelton	Beatty
Elnora Pirtle	Scheelite
Preston Price	Lincoln County
Ronald E. Riding	Blue Diamond
Oren Sassman	Pershing County
Gladys Schooley	Storey County
Roy F. Smith	Wells
Josephine Snead	Blue Diamond
Dell Sullivan	Pahranagat Valley
Ralph Talso	Nixon
John E. Tietema	Eureka
Marie York	Mina
Alfred L. Zon	Carlin

CONSULTANTS

1963 SUMMER WORKSHOP
WSSSP - NEVADA

RALPH G. BOHRSON
General Coordinator, Western States Small Schools Project, Denver, Colorado

B. FRANK BROWN
Principal, Melbourne (Florida) High School

MARLENE BUTORAC
Professor of Education, University of Nevada

VERNON EADY
Professor of Education, North Texas State University

JAMES FINN
Principal Investigator, Technological Development Project, (NEA;USC)

JAMES HALCOMB
Principal, La Mesa Elementary School, San Diego County, California

MARIE HUGHES
Professor of Education, University of Utah

ROBERT ISENBERG
Executive Secretary, Department of Rural Education, Washington, D. C.

M. DELBERT LOBB
Assistant Superintendent, Fremont (California) Unified School District

THOMAS TUCKER
Professor of School Administration, University of Nevada

ROY DE VERL WILLEY
Professor of Elementary Education, University of Nevada

WSSSP WORKSHOP, JUNE 10-14, 1963

DAILY SCHEDULE

	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY	
	Elem.	Sec.	Elem.	Sec.	Elem.	Sec.	Elem.	Sec.	Elem.	Sec.
9:00 9:30	ADMINISTRATIVE DETAILS									
9:30 10:30	GREETINGS		Hughes	Brown	Finn		Eady	Lobb	Eady	Lobb
10:30 11:00			COFFEE BREAK							
11:00 12:30	Hughes	Brown	Hughes	Brown	Halcomb	Finr	Eady	Lobb	Eady	Lobb
12:30 1:30			LUNCH							
1:30 3:00	Hughes	Brown	Hughes Butorac	Brown	Halcomb	Isenberg	Demo.	Lobb	Willey	Lobb
3:00 3:30			COFFEE BREAK						General Closing	
3:30 4:30	Hughes	Brown	Butorac	Brown		Isenberg	Eady	Lobb		
4:30 6:00			LEISURE HOUR							
6:00 7:30	Brown		Supper - Speakers Noted Hughes		Isenberg		Tucker			

In the above schedule, which is the one actually used during the workshop, the method used to separate groups (when desired) may be seen.

Additionally, it should be noted that refreshments during the breaks were served in the immediate area, which had the effect of making the breaks extensions of the sessions just concluded.

GENERAL INFORMATION

It is always difficult to state, with any degree of certainty, when plans for a given activity are actually commenced. This is certainly true with regard to the 1963 Summer Workshop held for Nevada participants in the Western States Small School Project.

In retrospect, it probably should be said that the planning for the 1963 workshop began even as the 1963 activity was still in progress. While the 1962 event was in process, certain weaknesses were noted, and some thoughts were given to ways in which the weaknesses, or deficiencies, might be strengthened or corrected.

Further planning was accomplished in two meetings of administrators of schools which are presently participating in the project. At these meetings several guidelines, as it were, were established, and these provided invaluable assistance to the project director in finalizing workshop plans.

A third phase of the planning involved the project director and members of the University of Nevada faculty. Several meetings between the project director, Dr. J. Clark Davis, and Dr. Stinson Worley were held, and again, further guidelines were established.

In a very general sense, it might be said that the 1963 workshop was the net result of the planning which preceded the event. In a more specific sense, it should be noted that as a result of the planning, goals or objectives were able to be established. These, in turn,

resulted in the general structure of the workshop. Among these were:

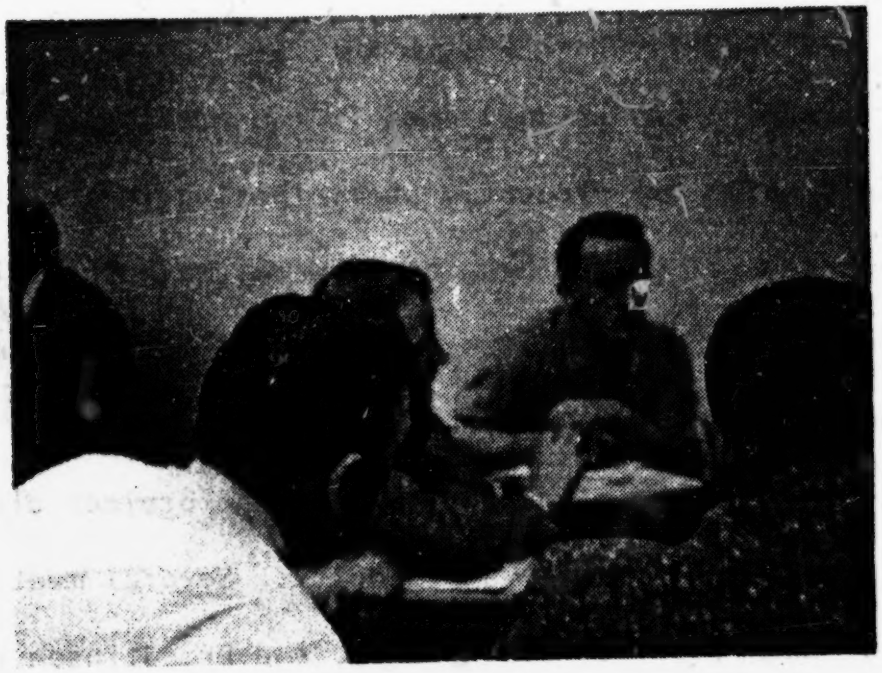
The workshop should serve as a source for ideas.

The workshop should serve as a source of information.

The workshop should serve as an agency facilitating an interchange of information.

The workshop should serve as a vehicle in which ideas could be structured so as to provide specific tangible assistance to teachers.

The above collectively indicate the nature of the specific goals. Overriding all was the hope that each teacher or participant would be able to develop a brief plan aimed at improving the educational program in his or her particular teaching situation, and in terms of the over-all plan of the Nevada WSSSP.



From workshop participants - - - -

Planning

WORKSHOP ACTIVITIES

As indicated in the schedule of the 1963 workshop, participants were separated into two basic groups, i.e., those teachers and administrators concerned primarily with elementary teaching, and those concerned primarily with secondary situations. The consultants were then assigned to groups on the basis of background, preparation, and interest. At the same time, provisions were made within the schedule to enable all participants to meet as a single group for those presentations which were of a more general nature.

For the most part, the several consultants used the first hour or two of the time assigned to set forth their own ideas. Frank Brown, for example, presented a resume or review of how and why a high school might be able to individualize instruction if a "non-graded" approach were to be used in scheduling. He then spent several hours discussing specific possibilities with smaller groups, and related his thinking to the smaller schools which were represented.

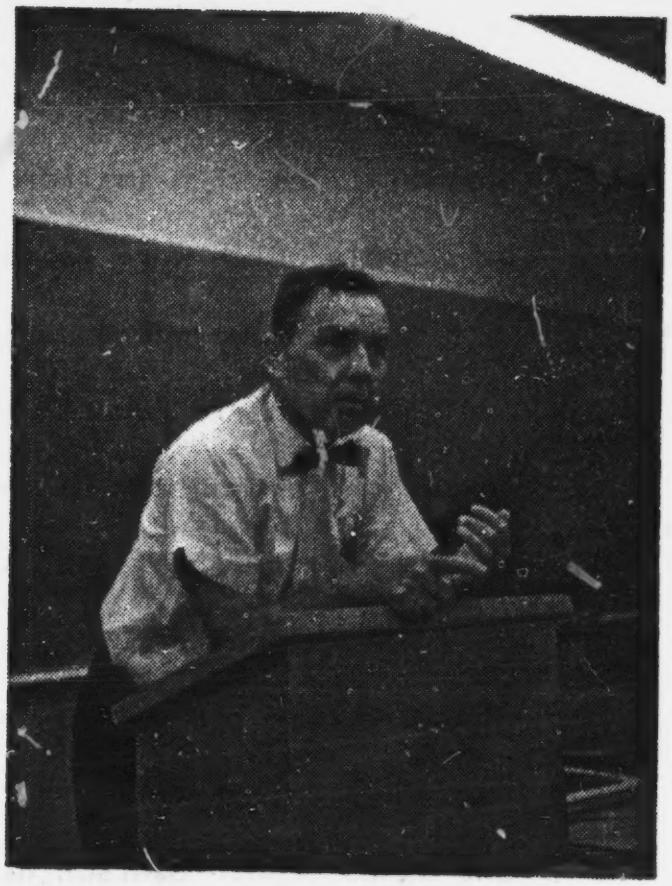
While Brown was discussing the non-graded approach with the secondary people, Marie Hughes was explaining the role of creativity in teaching to the elementary teachers, and emphasizing the importance of creativity if individualization of instruction is to be achieved. In general this was the pattern, although the group met together at times to hear presentations and to see demonstrations which were of common interest to all. Typical of this type were the presentations made by Ralph Bohrson and James Finn. Bohrson discussed the need for further experimentation

From the University of Nevada - - - -

Greetings are expressed to the WSSSP Workshop participants by Dr. Kenneth E. Young, Vice-President.

From Melbourne, Florida - - - -

Dr. B. Frank Brown explains how individual-ization of instruction can be achieved through a non-graded approach to scheduling and curriculum development.



and action on the part of teachers and administrators, while Finn reviewed the area of technological developments which offer strong possibilities for improvements in the smaller schools.

In addition to the above presentations, two demonstrations were held for the entire group during the workshop. The first had to do with the speakerphone, and enabled the entire group not only to see the device, but to see how it might be used to enrich the learning situations in the classrooms. This demonstration featured a call from Byron A. Stetler, Superintendent of Public Instruction, who at the time was touring the educational system of the Republic of West Germany.

The other demonstration featured the work of Mrs. Elnora Pirtle, one of the project teachers during the past year, together with some of her pupils. In the demonstration, Mrs. Pirtle showed how she has used the tape recorder in the Scheelite School to "gain" more teacher time. Another portion of the demonstration included a description of how community resources had been tapped in order to provide an ungraded primary foreign language program within the school.

A major highlight of the workshop was the series of structured evening meetings, where all participants had an opportunity to hear people who "had been meeting with the other group". Secondary people who had not been able to hear Marie Hughes were thus able to do so, while elementary people who had not been able to meet and hear Bob Isenberg were likewise able to do so. All had the opportunity to hear Isenberg present a vivid description of notable efforts that are being made in other parts of the country.

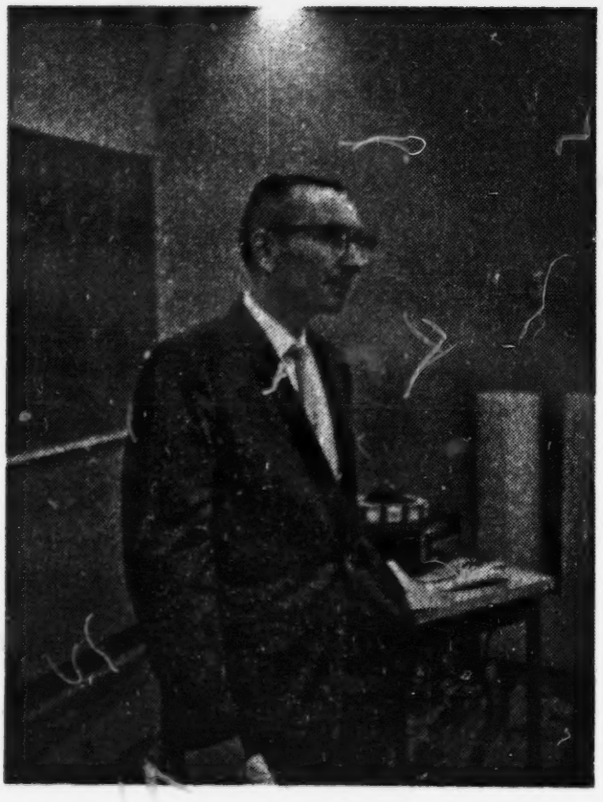
Two of the consultants, James Halcomb and Vernon Eady, presented approaches to teaching specific areas, again with the hope that participants might see how individualization of instruction at the

From Denver, Colorado - - - -

Ralph Bohrson, General Coordinator for the WSSSP, brings greetings and expresses his ideas on the need for action.

From La Mesa, California - - - -

James Halcomb explains the "language-experience" approach to learning.



elementary level might be effected. In line with the pattern described earlier, both consultants were able to discuss specific applications and possibilities with individual participants.

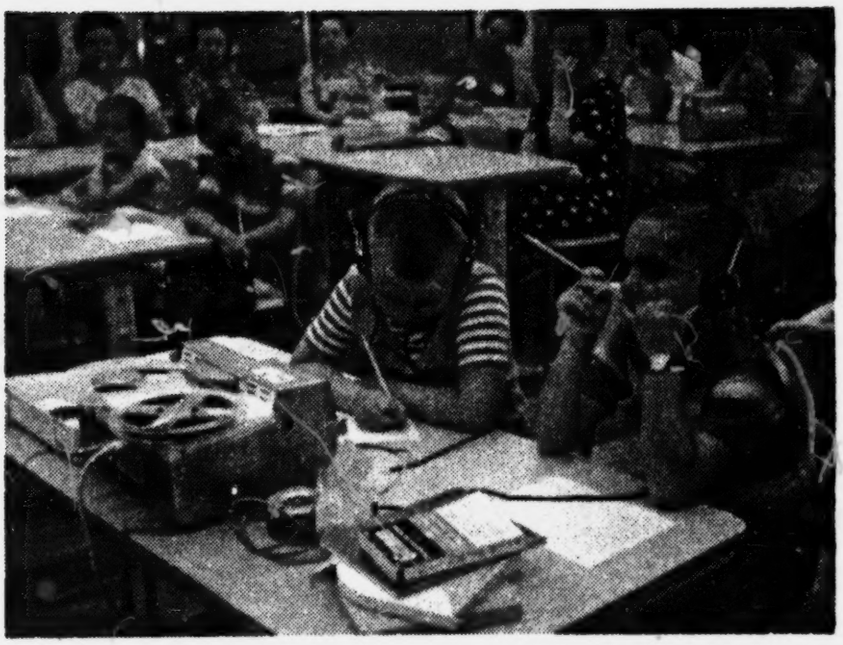
While the elementary people were involved with different approaches to learning, the secondary people were meeting with Del Lobb, who was explaining how many aspects of the educational program might be strengthened if a different utilization of personnel were considered. Such redeployment, Lobb pointed out, could result in more effective scheduling, better curriculum practices, and more opportunities to individualize the total educational structure in the small school.

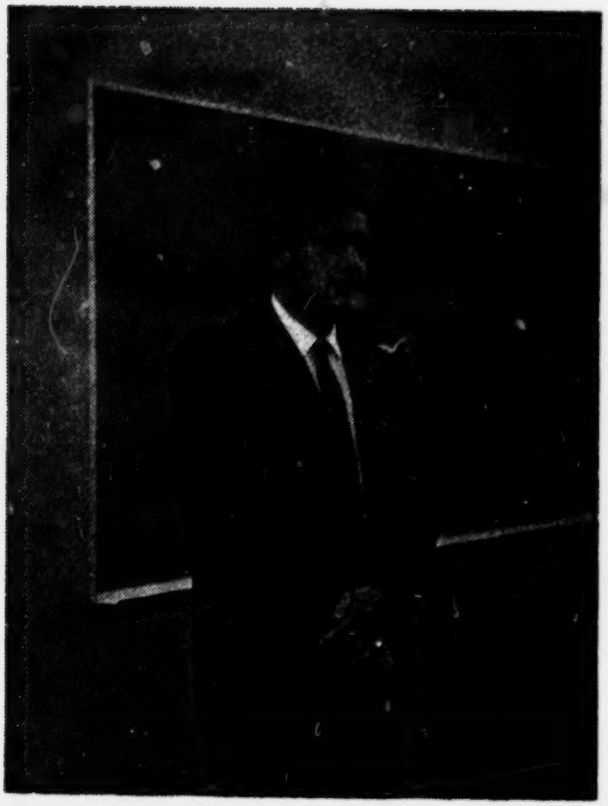
From Scheelite, Nevada - - - -

Mrs. Elnora Pirtle, teacher at the Scheelite School, discusses several ways in which the educational program at Scheelite was strengthened.

Still from Scheelite - - - -

Pupils demonstrate how the tape recorder can be used to bring about a better utilization of teacher time.



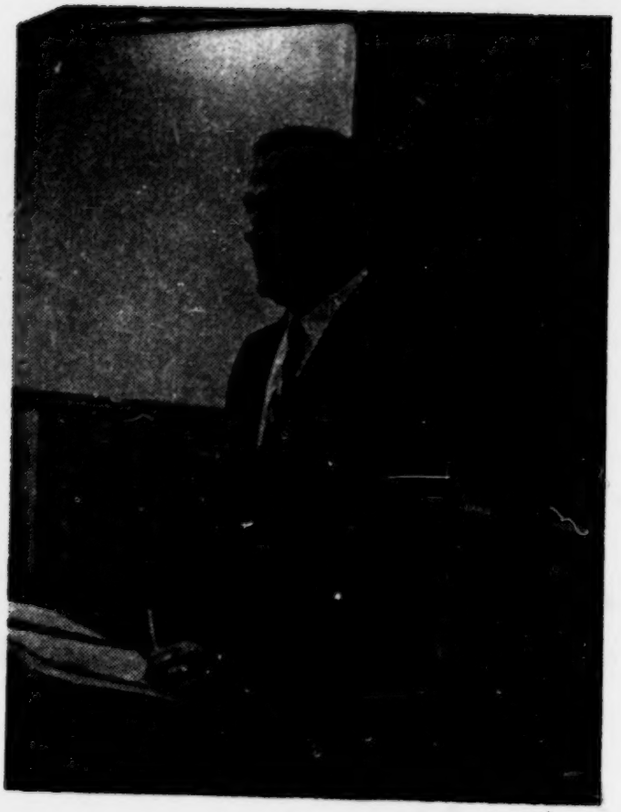


From Denton, Texas - - - -

Dr. Vernon Eady discusses ways of integrating the curriculum with the elementary teachers.

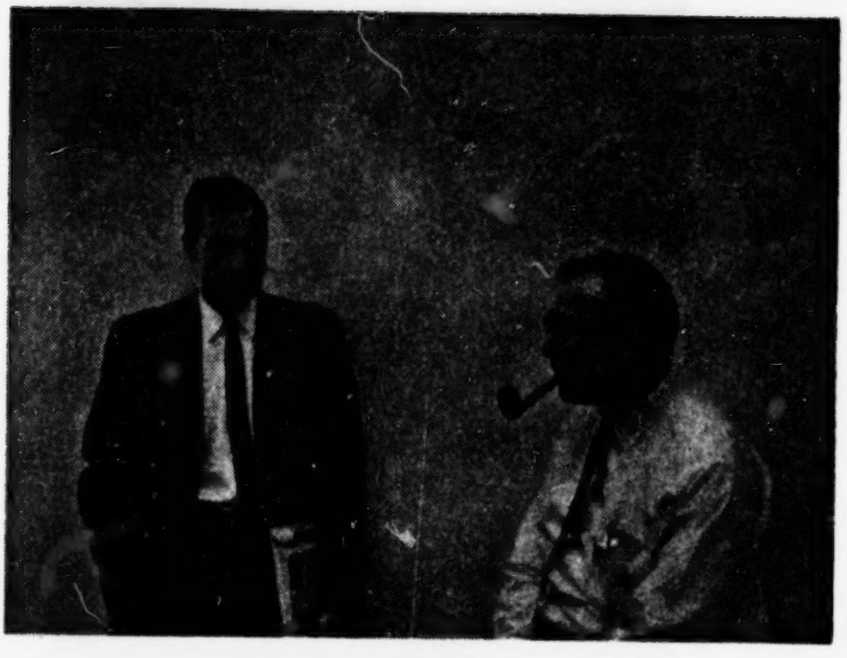
From Sunnyvale, California - - - -

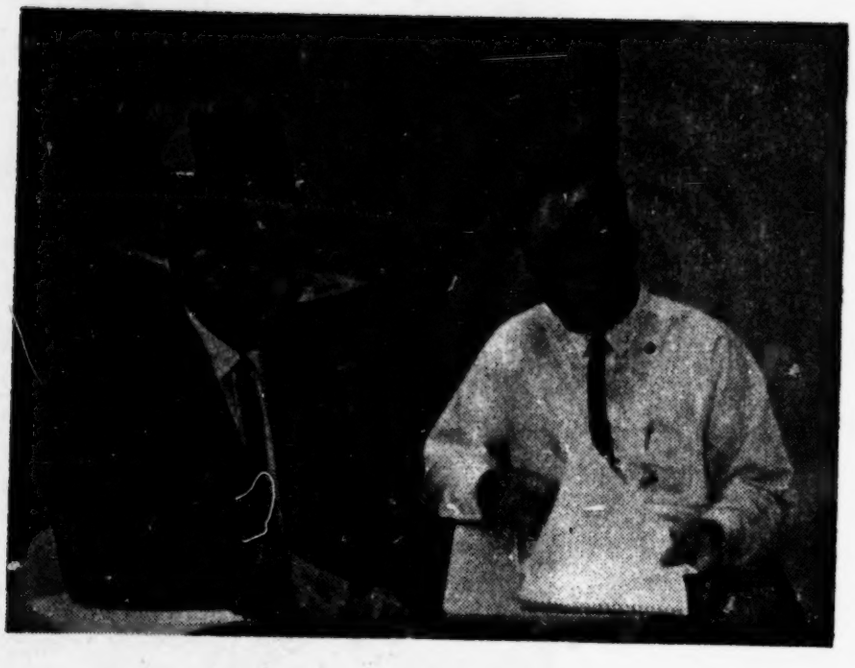
Dr. Del Lobb explains to the secondary people ways in which their programs might be strengthened through better utilization of personnel.



From Denver and Washington - - - -

Ralph Bohrson and Robert Isenberg, Executive Secretary of the Department of Rural Education, discuss things during a break.





From Mesquite, Nevada - - - -

Blaine Allan, Principal, goes over some of the finer points with Del Lobb.

Note: The following was written by one of the teachers participating in the WSSSP for Nevada, and seems to reflect both the need for, as well as the nature of, experimentation.

A TEACHER'S PHILOSOPHY OF EDUCATION

By Marie York[1]

Before school opens I read over the records, not just of last year but of all the years to date, to see which pupils have been progressing steadily, which losing out a little, which forging ahead. Our cumulative records contain results of tests, notes on classwork, on health, and on social contacts. Our pupils are given standardized tests in March or April of each year. I immediately compare results with each child's past records and with the results of all the members of the class. This helps me separate my class into groups for various subjects, and gives me clues on teaching each group. I retest at intervals myself, sometimes using weekly tests printed in the books and sometimes tests I make myself. Then I group as necessary to give help to those who need it and to allow others to work faster or at extra activities. I take into account each child's written work. I observe the children on the playground and in the classroom; their friendliness to me and to their classmates, their facial expressions, their enthusiasm.

I put forth an extra effort to win the immediate and continued cooperation of a pupil who might be inclined to misbehave. It is important to know and understand each pupil so that you do not start his year off by expecting him to do work beyond his ability. If this is accomplished all pupils are challenged and will not settle into boredom.

The sooner you ascertain the facts, both good and not so good, on which you must chart your course, the happier the year's voyage will be for you and for each of your pupils. You have a definite point of departure from which you can calculate your progress. Knowing a child you are teaching is very much like knowing a subject you are teaching; it gives you a sense of security. But in each case you must, like a good mariner, keep eyes, ears, and mind open and be ever ready to avoid dangers and to take advantage of favorable currents and winds.

Early awareness of pupil's good points is even more important than awareness of potential difficulties. It lets you begin the year by giving the pupil an opportunity to earn praise from you and recognition from his classmates. This lessens the strain of the opening days for him and for you. If you can arrange for a considerable number of your pupils to start immediately on work they like and do well, you create the favorable emotional tone which is so important to good morale and high achievement. Of course, you can never know all about a child. The most thorough-going case study misses some facts, and perhaps important facts. Sometimes, because you are a good teacher and a child knows you like him and are trying to help him, he gains the strength to solve a problem of which you were never aware. And certainly your efforts to inform yourself about him as well as the facts you discover will increase your sympathy and your objectivity.

[1]Marie York is a teacher in the Mina (Nevada) Elementary School.

WHAT TO LOOK FOR

A sevenfold classification has proved very useful to us in our efforts to guide children. They are: (1) Family, Home, and Neighborhood, (2) Physical Development and Health, (3) Social Development and Status, (4) Emotional Development and Mental Health, (5) Mental Development, (6) Motivation, and (7) Achievement. It is helpful to make a regular practice on the first day of the year to have each child fill in a form designed to bring the record up to date. Here are some of the questions that may be useful.

What do you like to do most out of school?
What do you dislike most in school? Out of school?
What do you worry about most at home? In school?
What was the last book you read at home? Magazine? Newspaper?
What would you have liked to learn more about in school last year?
What do you most want to learn in school this year? Why?
What do you want to be when you grow up?

One system that ensures an occasional talk with every pupil, in order to know them better, is to make brief conferences a routine part of instruction. When the class is studying, the children take turns coming to your desk, ostensibly to talk over their work. If you talk for five minutes with, say eight pupils a week, you'll meet with each child in your room several times a year.

Standardized tests have proved their worth beyond question. Frequently they show a teacher that his subjective judgment of a pupil has been wrong, that he has been unfairly underrating a pupil or demanding too much of him. They are an important tool of guidance, one that can be used by teachers, counselors, and the individual himself. Wisely interpreted, they so generally predict the subsequent academic achievement of pupils that they are more and more used at all levels of education. They are the nearest approach researchers have to the measurements necessary to create a science of education. When a pupil's rank order surprises you, take pains to reconsider your judgment. Your judgment has probably been correct, but you may have been misled by a halo effect, the quietness of the child, or even an unsuspected prejudice.

Great care should be taken to avoid placing excessive emphasis on a single test score. It should be understood that no test is perfectly reliable or completely valid, and that temporary conditions, such as ill health or emotional disturbance, may cause a child to work below his ability level on some occasions. It is desirable, therefore, to interpret the test scores in the light of all the information that is available about the pupil on his cumulative record card whenever possible.

EXAMINATIONS BY SPECIALISTS

You are lucky if your school has a psychologist on its staff or if there is a child-guidance clinic to which you can refer puzzling or difficult cases. You are doubly lucky if you receive complete reports and continuing guidance in handling the child. Other specialists have similar special resources. When you are referring a case to a

specialist, you will protect yourself and help him by giving him an anecdotal record or diary of the incidents of behavior which made referral necessary. Complete objectivity is a must. If you interpret at all you sound as though you were arguing for your opinion, and the specialist may think you are usurping his function.

CONFERENCES WITH PARENTS

Some schools and some individual teachers make a point of the teacher's knowing the parents of each pupil. Perhaps the greatest influence on the child is the emotional atmosphere of the home. Plans for the child's future are another productive topic. Parents are likely to be your best source of information about a child's relations with his siblings, about any unusual experiences he has had, about his health history, and about the economic and cultural status of the home. Be sure to note the parents' general attitude toward teachers and toward education.

THE PROBLEM OF METHOD

While I favor the method whereby the pupil himself is permitted to follow his own interests and is made responsible for his own progress, more or less, there are many times when a child needs to be tutored individually. My method employs any means which provides for individual differences. The basal texts are very important, but in connection with these it is necessary to adapt them for the pupils in order to meet individual needs or to have pupils carry on various projects or units of work that are timely. Sometimes these activities are suggested by the text, sometimes by me, sometimes by the pupils. Usually the pupils have a major part in the choice of a unit, and they often plan much of their own work. Our schedule, allots specific periods to each study but also allows flexibility in order to cope more fully with individual differences. There is a general period each day which allows for individual help, either as a part of a subject-matter period or scheduled separately. Sometimes it is necessary to have this period before or after school. It is designed to tutor individuals.

Interclass grouping is used allowing me to concentrate attention on a few pupils while the others study assignments or carry on the work of their units or projects. Because the distribution of the limited amount of time available is a controlling factor in every effort to teach individuals, scheduling is very important. The schedule is flexible, but for the most part I must live within it in order to guard against slighting some part of the curriculum. I may inadvertently devote too much time to a project or to a subject in which students are deficient or in which the children are more motivated. One safeguard is to think back over a week's work, figure the time actually spent on each subject, and compare the results with the schedule. Then, with the children, plan to consider the neglected area.

GROUPING

Treating a whole class as a single group would be the most efficient form of instruction if it were not for individual differences. But it is in fact the most wasteful. Pupils who do not understand what the teacher is saying are wasting their time; so are the pupils who already understand it. When the teacher takes time to repeat and elaborate an explanation for the slower pupils or to propound ideas which only the better pupils can grasp, the loss of time is compounded. Intraclass ability grouping is designed to solve the problem. The practice is common in reading in all elementary grades and frequently is used in arithmetic and other subjects. After I have thorougly studied each child's cumulative record I group the children on the basis of all the information available, including my experience with children. No matter how I originally choose the members of groups, shifts from one group to another may be advisable on very short notice. Flexibility is essential. This applies to the membership of the groups, the size of the groups, the number of groups, and the amount of time allowed for each group to work with the teacher. Be alert for pupils who learn quickly or slowly, who remember well or forget easily, who need the challenge of hard work or a forceful reminder that they are not doing well, who have had special experiences. Such pupils should generally be shifted as the occasion indicates. There are many other ways for grouping at various times, in addition to ability and achievement. A common interest, a pupil who is slow in making friends might well be placed in a group with good mixers, even when this means stretching the academic range. The thought is, "What's best for this pupil?" Pupils who have not been used to working in small groups have to learn to plan, work without interfering with others, get out books and materials for themselves, and seek out answers to their questions rather than always turning to the teacher. The teacher will be busy teaching another group and using the basal text. These pupils need time to learn these things and to become accustomed to independence.

Grouping solves some of the problems that arise when pupils of different abilities use the same text. The groups can go at different speeds. You can adapt your contributions and comments to the abilities and interests of individuals in the group. You can elicit responses from each child and, in the light of your knowledge of the child's needs, direct the discussion so that he feels satisfaction in what he has learned and sees how he can use it in the future. You can assign him independent work, to be done when his group's turn is over, that will help him overcome his particular deficiencies or develop his particular interests.

ADAPTING METHODS TO ABILITIES

The pupils' papers on units show the need to adapt methods to abilities. The brighter children analyze and reason well, are original, resourceful, have initiative and can interpret abstract ideas. Therefore, they can engage in long-range assignments, recognize related materials, organize materials, and criticize their own results. They need opportunities which challenge them.

Slow pupils, on the other hand, learn by simple mental processes, are confused by complex associations with a topic, prefer the concrete to the abstract, the specific to the general, and have little power of self-criticism. The wise teacher gives them specific assignments of short-time units and organizes their work so that they can proceed with order and certainty. Much use should be made of current events, real-life applications of knowledge, and visual aids. You must try to introduce novel and exciting activities, because these impress themselves on children and so make them learn more and remember longer.

Periodic tests in the fundamentals are essential, and a pupil who is not progressing in line with his ability should be given special instruction, including drill, when this seems advisable.

You, as the teacher, and the pupils, as learners, should evaluate results individually and collectively. Try to devise objective criteria by which you can judge progress and, ultimately, how well the goals of the unit have been achieved.

When any of the goals implied by the curriculum, or set up at the time the unit was inaugurated, concern social development, the teacher should help the pupils to generalize from what has happened in the unit to what ought to happen in real life. The principle that there is little transfer of training without generalization, without recognition of common elements in two situations, is as true of social learning as it is of other kinds of learning.

THE INDIVIDUAL PROJECT

Pupils of all abilities in all grades can carry out individual projects of their own. These projects may be undertaken as part of a unit, or in the development of a topic of special interest, or as an experience suggested by the teacher. A pupil who has a project under way can work on it when he has finished required work in less than the allotted time, when the teacher is working with a group in which the pupil is not included, or in periods set aside for all the children to work independently. Children who are able to read and write can collect their own materials, make notes, organize information, and write or rewrite their conclusions. The skills developed will be used more as the pupils continue their education.

REMEDIAL TEACHING

You can probably do as much as a remedial teacher could for a child who is making progress in line with his ability, even if his IQ is low and his progress correspondingly slow. This assumes that you are willing to take him where he is, provide books and materials that he can master but that are suitable for his chronological age, and give him at least his share of individual attention.

However, if a child's slow progress is not due to a lack of ability, he may profit greatly from some form of specialized remedial work. Even a short period of tutoring by a specialist may result in remarkable and permanent advances; hence this possibility should not be overlooked.

AUTOMATION

Education is still only on the threshold of the world of automation. Even such long-time favorites as filmstrips, motion pictures, and record players offer possibilities for individualizing instruction that have been little explored. Tape recorders are being tried in many fields. TV has barely made its debut in the classroom. In today's classroom one child may be viewing stereopticon slides, another child listening through earphones to a tape recording of his own speech, and a small group using filmstrips, while the teacher works with a fairly large group using a basal text. Tomorrow we may see classrooms with whole libraries of recorded materials, more easily displayed than a silent 16-mm film today. Then, when the teacher or the group wants a special demonstration or a snappy form of drill or a lesson in the language of the Martians, the bill can be filled by turning a switch.

INDIVIDUAL STUDY CENTERS

These should:

1. Not be an isolation booth;
2. Contain resources - both printed and realia;
3. Be a home base;
4. Provide for visual experiences;
5. Provide for audio experiences;
6. Have library communication;
7. Be experience centered;
8. Contain storage;
9. Contain catalogue of experience.

The art in the management of materials at the study center is to have them at the right place, at the right time. They should be available in proper condition and amount, and should be appropriate to the need of the moment. The center should provide materials which will help young people to satisfy their curiosity about the world in which they live, and there should be enough variety to permit growth in varying abilities and capacities. The ultimate goal should be to encourage a search for knowledge and understanding. Children should be kept alert to the inexhaustible nature of experience.

We have much more to teach; children have much more to learn. However, because of fundamental economics the existent educational program is often limited. Automation, including TV, already makes it possible for the curriculum to include subjects like foreign languages, music, and science, in which the classroom teacher may not be an expert.

Moreover, by this means instruction can be adapted to meet the needs of one pupil or a small group of pupils in a large class, or a very large group. Techniques of organization, planning, and evaluation are still being developed, but they will probably be much like those now used in a unit.

Mechanical, visual, and, might we say, oral aids to instruction have the great advantage of novelty. They catch the children's attention and create a feeling of excitement, and thus promote quick learning and good retention. For this reason it is difficult to assess the relative effectiveness of older and newer methods.

There will always be pupils who learn better by seeing and hearing demonstrations than they do by reading. But no one now knows whether in the long run automation will increase the effectiveness of classroom instruction. Certainly there is little ground for the fears that the wide use of TV programs, teaching machines and other new media will regiment the new generation. The greater probability is that the curriculum will be broadened and the individual needs of pupils better met.

We will experiment particularly with better utilization of multiple-class teaching, film teaching, small group techniques, curriculum improvement, flexible schedules, programing techniques, cooperative seminars and the use of the tape recorder especially. All will be used to better individualize instruction for all the pupils. We will be ever mindful that schools are for children. We will endeavor to better meet their needs. We want self-improvement for everyone.

Teaching must become more specialized, we must try to make teaching more rationally organized. There is so much to be done that the summer months could well be used for planning and self-improvement. I, for one, do not like to be unemployed for three months each year. The work that is necessary to improve the learning of children to meet the needs of their future should mean a longer year.

Are there too many new things? No, not if they make for better education of children. Will they free the teacher for more individual relationships with the child? If so, they're good. Where they have been tested, students, teachers and parents seem to like them.

THE TELEPHONE AS A TEACHING TOOL

People throughout the United States, and for that matter throughout the world, have long been accustomed to the ring of the telephone in their homes, their businesses, and their offices. From the time of the invention of the device, telephone facilities across the nation have multiplied many times. Along with the increase in facilities there has been, in recent years, an almost unbelievable growth in more specialized devices and techniques which have eliminated many of the delays which formerly were commonplace. Today it is as easy to be connected to an office in mid-town Manhattan as it is to your own home.

In addition to the use of the telephone as a vehicle for instantaneous communication, industry has for some time been using it for other purposes, i.e., for purposes other than two-party conversations. Recently developed equipment has made it possible for information recorded on tape to be transmitted, via the data-phone, from one office to another at an extremely high rate of speed. Other developments have made possible the conference call, whereby any given number of people in various locations can converse with each other. Developments such as these have been used, as has been indicated, in business and industry for several years, but it has been only recently that the telephone has entered the classroom as a bona fide teaching tool.

The device which has made the telephone a potential teaching device is known as the speaker-phone. This instrument looks quite the same as any other desk telephone normally found in offices, but differs in that it has an external speaker (amplifier) and a built-in microphone. With

these "extras", it is possible to have two-way communication between members of a group, or class, and some other person.

In Nevada, the device has already been used on a limited scale. The American Government class of the Wells High School has listened to and talked with several personalities, including Governor Grant Sawyer, Senator Alan Bible, and Senator Howard Cannon. In each of these instances, results have been quite good. Other schools are making plans to use the device or technique in subject matter areas such as English and Science. Still other schools are contemplating using it for assembly presentations, specialized lectures, etc., where the receiving group will be larger than a normal class. In these latter instances additional amplification equipment will probably be necessary.

It is felt that the speaker-phone provides all schools with a very economical method of bringing resource people into the classroom. In the case of the smaller schools, this device may well be the only method to bring outside people to the pupils, and in this light it may be even more important to these schools.

When costs are considered, it should be noted that an outlay of money for equipment rental and toll charges is required. The monthly rental charge for the equipment will vary from about five to seven dollars per month, and the toll charges will vary with regard to distance and time, as with any long-distance call. But where the costs are considered in light of what might be achieved, or in light of the other, more normal operating costs, it can be seen that the necessary outlay is in reality quite modest.

To illustrate the previous point, one can look at long-distance rates as quoted for three minutes, and then, using the three-minute multiple, can compute costs quite easily. (Actually, this method will provide a margin of error, because the rates tend to decrease somewhat with an increase in length of call.) Using the telephone book as a reference, one can see that the three-minute rate (station-to-station) from Portland, Maine, to Reno, Nevada, is $2.25. Reno may be reached from Charleston, South Carolina, for a three-minute rate of $2.10. The same rate applies to a call from Washington, D. C. to Reno. It can be seen that the cost of a fifteen minute telephone presentation from the Senate offices in Washington to a school in Nevada should not be prohibitive for any district.

There undoubtedly will be some who will want to comment about the advantages of educational television, another recent innovation made possible through progress in technology. It should be noted that where it has been practical and possible to enjoy the medium of television in the classroom, the results have been quite good. However, it should be pointed out that television, as we know it today, is a "one-way street". All communication travels in the same direction, viz., from the person doing the actual presenting to the person or persons doing the watching, listening, or receiving. The preceding point should not be taken in a negative manner, but should serve to illustrate at least one limitation which is inherent in television at the moment.

In the use of the telephone device which has been described previously, the opportunity for instantaneous response and reinforcement presents itself. Questions can be raised, and answered, at the time of the doubt

or misunderstanding, and the point in question can be clarified. Additionally, and in like fashion, the "sender" knows immediately how he is being received.

As with any teaching aid or teaching tool, the telephone or speaker-phone should be used in the most effective manner. It should not be used only as a "novelty" or "gimmick", neither should it be used for "entertainment", as is the case with so many of the audio-visual devices. Instead, the speaker-phone and its use should be integrated into the content of the subject matter being taught, or correlated in some way with the goals which have been established.

It would seem that for any school considering the utilization of the device, the first step would be to thoroughly explore its potential uses. This type of pre-planning should be cooperative in nature, and should involve classroom teachers as well as administrators. After the potential uses have been surveyed, some attempt should be made to determine probable costs, in order that tentative budget allocations might be made. In determining the probable costs, representatives of the local telephone office should be contacted so as to have fairly accurate figures available. When these two things have been accomplished, the actual planning can be accomplished by the teachers and administrators.

Within the framework of the planning, it is again suggested that the scope of the subject matter, goals or objectives, and financial considerations be kept clearly in mind.

Questions such as the following might well be considered: Who is available? What can he or she add to the enrichment of my course? When would his or her comments fit best into the scope of the course content?

How much would a fifteen minute telephone call cost? How many such calls could I schedule during the school year?

There are of course many other questions which could and should be raised, but the above should be sufficient to indicate the sort of planning which should take place. If proper planning takes place, the educational uses and benefits of this medium will be limited only by the imagination and ingenuity of the teacher, within the overall financial framework noted.

From Bonn, Germany - - - -

Mr. Byron Stetler, State Superintendent of Public Instruction for Nevada, sends along his greetings to the group in a demonstration of the "speakerphone". The participants were not only able to see how this device might work, but were treated to some first-hand observations of the German educational system, as seen by Mr. Stetler.

THE NON-GRADED HIGH SCHOOL

By B. Frank Brown[1]

Just a little over two years ago we elected a new President of the United States. Robert Frost had hardly finished reading poetry at the inaugural before this new President issued a clarion call for an increased emphasis upon physical education. A great many governors rallied to the call to arms and proclaimed "Physical Fitness Weeks" in the various states. Since most school administrators were formerly coaches, Physical Fitness Week has become the educational event of the decade.

More recently, this same President at last found a way to fulfill a campaign promise and get the country moving again. He temporarily put aside the Peace Corps and issued a summons to Americans to join a Pace Corps. In this activity politicians started crowding the Boy Scouts off the road in the wooliest pursuit in the history of chasing wild geese. With some temerity and a great deal of trepidation it is suggested that we have some presidential pressure upon intellectual rather than physical development. If it is fashionable to have a slim waistline can it not also become stylish to be bright. Where education is concerned it is high time that we stopped flying by the seat of our pants. Along with the new stress on physical education, driver's education got into the schools with relative ease. It is my hope that intellectual education will not have to wait too long outside the school yard. I submit that the headbone is more important but less used than the footbone. James Reston, an unemployed writer for the New York Times said it even better when he wrote recently that: "What the country needs is not the 50-mile hike but the 50-minute think."

Speaking of current educational absurdities, you may have seen the recent issue of the U. S. News and World Report which described the textbooks that are being used in America's schools as "sawdust sandwiches".

I have a copy of the item with me and i would like to read a few lines from this clipping:

> "These beautifully printed and illustrated books include texts so remarkable for their dullness that it is little wonder young America can hardly wait to get back to the TV set. Most of the schools' textbooks have been steam cleaned of every vestige of excitement, of inspiration and romance.
>
> "It's time America got a new set of textbooks. It's time we quit boring bright students to death with the banalities of John and Jane visiting the henhouse. It's time we put romance and courage and excitement and some frank moral indoctrination before our children in their most impressionable years.

[1]B. Frank Brown, Principal, Melbourne (Florida) High School

> "We don't have to go back to McGuffey.
>
> "There's plenty of good writing. But let's give our children some literary taste, some ethical calories and patriotic vitamins."

The article concludes with this pungent statement:

> "To hell with those sawdust sandwiches!"

In the past the American School System has grouped youngsters in grades on the basis of chronological age and promoted them after they have spent a year studying one textbook. The grade-by-grade hurdle is really a textbook-by-textbook hurdle, or, if we give any credence to the U. S. News and World Report article, a sawdust sandwich hurdle.

These sawdust sandwiches have strait-jacketed kids. The biggest obstacle to abolishing the grade as an organization is what materials to use -- crass evidence of the domination of the curriculum by textbook companies.

John and Jane's trips to the henhouse are not the only triviality in the nation's textbooks. They are literally overrun with absurdities.

Take the new MacMillan Latin book which is used in most of the nations' schools. On page 22 we find Marcus in Rome on an adventure which is described as a "picus nicus". An asterisk by this strange un-Latin word causes one to glance at the vocabulary and there, footnoted is this explanation:

> "Picus Nicus -- a word made up just for you, it is translated picnic."

Can you imagine anything more ridiculous than a textbook publishing house making up Latin words for picnic?

But this is only the beginning -- a few lines further, one finds Marcus on the Appian Way drinking a "Coccam Colam". The by now familiar asterisk refers to a footnote which explains that coccam colam is a "made up word" for Coca Cola. Picture Brutus and Cassius at a picnic along the Tiber drinking Coca Cola and Orange Crush!!! Dr. Pepper should sue.

Sawdust Sandwiches indeed!

Please don't blame me for these absurdities. I simply record the facts, as Mencken used to say, "in sad scientific spirit".

In our search for a new excellence in education we are embroiled in a great debate on the use and effectiveness of mass media, especially television. The clamor on both sides reminds me of a bit of wisdom expressed many years ago by Thoreau who said:

> "We are in a great haste to construct a magnetic telegraph from Maine to Texas, but Maine and Texas, it may be will have nothing important to communicate."

So what do we have to communicate to Latin America, the new countries of Africa and Asia? Old cowboy movies? The self-contained classroom? Graded Schools?

Incidentally, you might be interested in a "bare bones" history of the graded school. The idea of classifying students into grades on the basis of age with each grade aimed at a particular age level is medieval. It was originally conceived by John Sturum who gave general currency to the organization grade by establishing the first graded school in Strasburg, Germany, in 1537.

The derivation of the word "grade" underscores the antiquity of the concept. When Sturum first began to group by age, he seated all of the boys of the same age on a bench together. This bench, which had no back, was called a "form". The bench (form) nearest the teacher contained the first grade, the next one, the second grade and so on. From this beginning the word "form" later came to mean class or grade in school. "Form" is still used to denote the division of classes in England and in many private schools in the United States.

Credit, or discredit, for introducing Sturum's graded school plan to the American school system must go to John Philbrick of Boston who worked out the details for initiating this innovation in America in 1847. Under Philbrick's direction, the Quincy Grammar School of Boston formally opened its doors in 1848, becoming the first completely graded school in the United States with each grade directed at one age level. Much of the success of Philbrick's project was due to the warm and enthusiastic support given by Horace Mann, then Secretary of the State Board of Education for Massachusetts. Just prior to the opening of Philbrick's School with grades, Mann had visited Europe and been impressed with the idea of grouping children by age which was the common practice in the schools of Prussia.

Claiming distinction for introducing a new heresy, the Quincy School admitted its first pupils lumped into grades in 1848, and by 1870 American education, which had begun as a flexible enterprise, was lockstepped to the grade. As one observer put it, "the schools suddenly moved, from no system to nothing but system."

A hundred years after the grade was invented, we are still grouping all youngsters in the first grade when they are six years of age. This is educational nonsense and about as effective as grouping children by the length of their legs. We must stop chain-smoking ourselves to death with chronological grouping.

Many schools have refused to face the issue of a non-graded organization. Almost without exception schools justify their position on the grounds that homogeneous grouping and honors classes accomplish the same purpose as the non-graded school. I have no argument with either honors classes or ability grouping but let's call them what they are. Patchwork.

In the age of the hydrogen bomb a patchwork approach is educational absurdity. What the space age needs educationally is a crack public school system designed to educate more youngsters than ever before and do the job faster and better. The components for the kind of a school needed are inventiveness, flexibility and quality.

The innovation of the non-graded high school is out of the hot house. Unfortunately this iconoclasm is erroneously viewed by conventional school administrators, when they consider it at all, as an esoteric organization suitable only to unique situations. In reality, there is nothing mysterious nor singular about this provocative new heresy. It is a clear, crisp, logical arrangement by which schools can take off the academic bridle which restrains youngsters intellectually.

If the public schools in America are ever to achieve the ideal of having each youngster progress at his best rate of learning, then some form of non-grading must be instituted. This leads to the shattering implication that within the next five years every intellectually respectable high school will have some degree of non-gradedness. The grade which has been a bellwether for centuries, is a trapping of the outworn past.

The holding power of the grade is its convenience as an administrative device. It serves as a comfortable coterie in which school administrators can, and do, catalog youngsters for custodial purposes and forget them for a year. By comparison, non-grading is an administrative prickly pear constantly needling for attention to the learning needs of students.

In the light of developments in the fields of missileology and satellite technology we must disengage ourselves from the commitment to the grade and recast the organization. Students must be realigned in staggered depth for individual and imaginative learning. The academic design from kindergarten through sixteen (twelve grades and four years of college) should be reduced from sixteen fragmented divisions of learning, to five general areas with learning continuous within each. I would like to predict that the school of the future will comprise:

The non-graded Primary Curriculum

The non-graded Intermediate Curriculum

The non-graded Junior High Curriculum

The non-graded Senior High Curriculum

The non-graded College Curriculum

I venture upon this prediction with considerable trepidation. The folksy philosopher Josh Billings is reported to have said:

> "Don't ever prophesy, for if you prophesy
> wrong nobody will forget it and if you prophesy
> right, nobody will remember it."

The grim truth is that the graded school has reduced the school to a kind of genteel middle-browism. In its setting, which is largely middle class the school must deal not only with middle class youngsters but upper and lower classes as well. Upper class youngsters pose no

problem. They have their outside interests and activities, music, reading, etc. The difficulty is with the lower class youngsters who must spend a portion of the day in the middle class atmosphere of the school but much more time in their own lower class environment. The students are naturally difficult because of their situation. Instead of building a better mousetrap to cope with the problem, the school develops a hostility towards these youngsters who don't get along. The kids respond then with hostility. What is needed is a non-graded curriculum with a new design to capture the imagination of this difficult group which consists of 30 percent of the school population.

In graded education the administrator has become a caretaker. The principal's job is largely concerned with bells, and schedules and lockers and ledgers. Learning has been so incidental that we have never even developed a theory of instruction.

In graded schools we march boys and girls towards diplomas in lockstep conformity while their abilities and ambitions are shaped and colored as differently as pebbles on a beach. The idea that all 10th grade students are the same and should read the same books and study the same materials is educational nonsense. Some youngsters must be allowed to escape forward to enjoy the excitement of self-propelled and self-reliant learning. Those who fall behind must have work geared to their academic pace. The grade is too inflexible for this kind of learning. It is immobile and sticky like the tar baby.

Perhaps it is too much to ask that a school stimulate the imagination and creativity of every student. All I am asking is that the schools not make children less creative by making them all read the same books, hear the same lectures and do the same homework just becuase they are the same age. It is time that we disinterred some of our ancient practices. We need to haul them out, re-examine their worth, and give them a new quality.

It has lately become apparent that the slowest student in the school, as well as the brightest, is capable of things that we have never dreamed that he could do. Both individuals are slowed down because they are prisoners of each other in lockstep education. Until one breaks up grades, he doesn't realize how futile it is to be teaching a group of youngsters the same material merely because they happen to be the same age.

Learning is a many splintered thing. The educational enterprise should have multiple paths. Instead we have been saying, "Here -- take a card -- take any card -- take this card," and with a stacked deck, sending students down a single path. Non-grading is highly desirable for the bright students. For the dull ones it is essential. Speaking of slow students, the way to treat the slow is the same as we treat the fast. If we treat one properly then we treat the other properly. We should not educate them together merely because they were born in the same 365 day period.

For the last five years professional educators have been clobbered by the population explosion. The result is that everything that they are now doing in the curriculum is scanty and inadequate. The epitome of the matter is that today's high schools are so crammed with antiquated methods, obsolete textbooks and uninformed teachers that its educational product is too unreal for a real world.

While the schools continue to fiercely oppose innovation and change, let us look for a moment at what is happening in industry and society. We can't get jobs for everyone now, and five years from now this will be five times as hard. A graphic illustration of the extent that industry plans to make of automation is the proposal already on the drawing board, which will liquefy coal in West Virginia and pipe it to New Jersey as slurry. Cybernation of this one process will replace hundreds of individuals who are trained only in single skill jobs. Already because of automation most single skill jobs are being cybernated away and yet the schools continue to educate and train individuals for specific and single skill jobs.

Young people are born with a vast potential for creativity. Most of this inborn characteristic becomes wasted in atrophy as the result of childhood experiences in the home and in graded schools. The schools must recognize the fait accompli that man differs from animals in that he has the capacity but not always the motivation towards curiosity which must be kept alive. The schools have been wrongheaded in that their concentration has been on motivation towards textbooks and school assignments which are often dull instead of towards being inquiring and curious. The creative high school student is an interesting sort not at all overcome by the odds. He has a remarkable tolerance for uncertainty.

In a day of vacillating allies, proxy battles and undeclared wars the school needs a flexible imaginative curriculum, to enable it to precisely educate students who will deal with unprecise situations. This asks of the schools unfettered imagination in the development of an educational program designed to conserve and strengthen the gift of curiosity and imagination.

There is nothing difficult or even new about ungrading. Athletics and Band have long been non-graded. In the effort to have a bigger band or a better football team, the grade lockstep was broken in these areas years ago. By contrast, academic subjects which are less passionate matters have remained frozen to the grade. The result is that schools are now suffering from an academic arteriosclerosis -- a sort of intellectual hardening of the arteries.

If the I.B.M. machine which group youngsters mixed some up, or if the textbooks got mixed up and kids took English 4 before English 3, it wouldn't make a great deal of difference in academia.

In America we have the peculiar notion that a thing is good merely because we have been doing it for a long time. This is reflected in the schools which are both the inheritors and prisoners of a lengthy tradition. Our curriculum was largely developed in the 19th century and much of it has a "built in" obsolescence. Grades should long ago have been retired on a pension. I am not asking that we be slam-bang up to date, only that we come up to 1946.

We have tried to open young minds with the two-edged can openers of "drill" and "grill". The school's emphasis should be placed upon the student rather than upon the subjects to be studied. The school will then adapt itself to the students' rate of learning rather than the placement of subjects in the curriculum.

Let me illustrate how rigid subject-placement deters learning with the case of a 3rd grade teacher whose classroom I visited recently.

> An excellent elementary teacher was bursting with pride as she demonstrated the skill of her youngsters in dealing with arithmetic problems, particularly in the area of short division. Pridefully concluding the lesson, the teacher, bubbling with enthusiasm said: "You know, I believe they are ready for long division." "Why don't you try it?" I asked. "Oh," said the teacher, "that doesn't come until the 5th grade."

By the same token many 9th graders are capable of doing 12th grade work, but the system requires that they first finish 9, 10 and 11 in chronological order. Incidentally, speaking of absurd practices in the elementary school, have you seen the recently published 32nd yearbook of the National Council of Social Studies Teachers? The whole thing is bad but one unit is just atrocious. It recommends that elementary children observe the anniversary of the United Nations by sending birthday cards to the United Nations. On the same topic it suggests that the class cut a birthday cake while singing Happy Birthday dear United Nations. Still another unit in this atrocious publication suggests that the children have a birthday party on February 22nd and sing Happy Birthday dear George Washington. I'd rather they stick to a "show and tell day". Many of the things we do in school can quite appropriately be labeled garbage. When I read junk like this I get the uneasy feeling that Admiral Rickover might be right about a lot of things -- and I don't like ancient mariners telling me how to run a school.

The schools of today must not only be on the cutting edge of curriculum change; they must keep cutting and not let the blade get dull. We can't ladle out education like we do soup and youngsters cannot be snowed and conned into knowledge. As educators we should relinquish our role as hucksters of tradition and become warriors of the imagination. It was Einstein who gave us the viable notion that imagination is more important than knowlege and freedom of the imagination is one of the most important things to be achieved pedagogically.

The question frequently arises as to how quickly a school can reorganize away from the ordained and long endured grade concept. There is no magic formula. For the iconoclast who is willing to drive all the sacred cows out of the barnyard at one fell swoop, the new organization can be planned in the summer and instituted in the fall.

For the less venturesome, I suggest the "spin out" approach. This is a technique whereby the school introduces a new practice alongside an old, and the cataclysm of the new spins out the old. With the "spin out" approach, the school simply ungrades its top students and its bottom students. Superior youngsters are always ready to move, and the slower group will welcome a breathing spell in which subject matter is geared to their rate of learning. Once introduced, the viability of non-gradedness will spin out of existence the system of grades. With a dexterous new school organization, everything that is presently taught in 12 grades can be taught in 6.

We are educating young people who will have active lives of from 60 - 70 years and most of it in the 21st century. To meet this challenge, the goal of the school then is to come out with individuals who are adaptable, individuals capable of quickly learning new skills when theirs have been cybernated away or when new professions are developed. If we fail in this goal, our society will be too rigid to deal with the future. Yet we cling tenaciously and securely to the graded school organization which is like an ice tray -- guaranteed to freeze into rigidity anything that is put into it.

In the not too distant past when people travelled by train, and I suppose that some still do, the railroads used a ticket with a stub which read, "not good if detached". Separated from the rest of the ticket the stub was of no value. In the same fashion, education is voided when detached from ideas of imagination, originality and spontaneity. We must remain undismayed even when the movement of new ideas seems irrevocably halted by the formidableness of obsolete, yet fiercely held conventions.

Education in the past, has been characterized by caution, conservatism and inhibition. We now need education which is experimental, flexible and unrestrained. If we are to meet the challenge of the century, the schools must become so experimental that as soon as they have a new innovation going, they must begin planning to make it obsolete. Only then can we avoid the fate of Sarah Lawrence College which started out to be experimental. Its new and exciting program became fixed. It ceased being experimental and became hardened to its experiment. We must take care that promising new heresies do not become dull new orthodoxes. We must get used to being on the cutting edge. When you clutch your goal in your hand it is no good. It must always be beyond reach. Each innovation should be a step out of which imaginative changes will flow.

THE LANGUAGE EXPERIENCE APPROACH TO READING

By James Halcomb[1]

Since the beginning of public education in the early colonies of the United States, the teaching of reading has been accepted as a primary responsibility of the school. As the public schools have assumed responsibility for educating "all of the children of all of the people", and as the demands for increasingly literate citizens have multiplied due to technological and social changes, pressures have been exerted to improve reading instruction. Teachers, administrators, curriculum workers, and reading experts have responded to these demands by developing at least three clearly defined approaches to reading instruction including: basal, individualized, and the language experience approach. The following pages describe the search of one elementary school staff for more effective ways to help children read. This search and the efforts of hundreds of teachers during five years of exploration resulted in a procedure termed, "The Language Experience Approach to Reading Instruction".

Background. The staff, whose efforts are described herein, was organized six years ago to occupy a newly completed building. The group was composed of several highly experienced teachers and many who were beginning their teaching career. All teachers were using a basal reading program with their groups and all relied heavily on the manuals accompanying the basal texts for teaching suggestions.

By the end of the first year of operation many of the staff expressed the need for improving the teaching of reading. A series of meetings was held which defined these problems and concerns of the group:

1. Individual needs were not being adequately met in three reading groups. This seemed partly due to the wide range of ability within each group and partly due to the inflexibility of the groups themselves in that children could not move readily from one group to another.

2. Pupil time was not effectively used in the reading circle. Though a continuous effort was made to insist that children follow as others read orally, many did not. Even when specific purposes were established for oral reading many children were not participating.

3. Worksheets required too extensive use of teacher time. The staff felt that worksheets performed the two major functions of testing and keeping children occupied. Many worksheets were not helping children read and excessive testing was reducing learning time.

4. At the primary level pupil control was difficult to maintain during independent work time. Many children were not sufficiently interested in the activities provided or were unable to relate to the content.

[1]James Halcomb, Principal, La Mesa Elementary School, San Diego County, California

5. Stereotyped grouping provided a psychological handicap for many children. Those children in low reading groups behaved like slow children in spite of mental ability. It was determined that upper grade children in low reading groups, regardless of intelligence, began first grade in low groups. Concern was expressed regarding the strong possibility that continuous placement in low groups was producing poor readers of children with average and above average ability.

6. Basic readers lacked motivation for many children especially at the primary level. Children who had never seen a farm or snow could hardly identify with the content or vocabulary of many stories. The rigid vocabulary control and speech patterns, especially at grades one and two, were far beneath the child's oral language ability. Many children felt such writing, though humorous, was not interesting.

7. Teacher enthusiasm for both the content and reading teaching became progressively less as the same basic materials were covered year after year. Though experienced teachers had amassed a backlog of worksheets, and though their reading program was clearly and comfortably defined for future years, many teachers found reading teaching a dull routine task.

8. Many children found reading to be a laborious task of calling words. It was felt this may be inevitable if the child does not identify with the content and if unfamiliar speech patterns are used.

9. Slower children had often heard several more advanced groups read the same stories they were to read. The freshness and appeal of the surprise ending, of new characters or situations were thus lost.

As the staff was developing techniques and procedures to minimize many of these difficulties, they had an opportunity to hear Dr. Victor Lowenfeld discuss the relationship of creativity and learning. This experience coupled with many discussions with Dr. R. Van Allen, then Director of Curriculum Coordination, Department of Education, San Diego County, resulted in a serious appraisal of the function of creativity in learning and in the adoption of the Language Experience Approach.

Creativity and the Language Experience Approach to Reading. The Language Experience Approach to Reading is more than a method or technique. It represents a way of thinking about children, language arts, and the teacher's role in promoting both language growth and children's concepts of themselves and language. Through creative activities in the Language Experience Approach, children develop: confidence in their ability to deal effectively with language, eagerness to express their unique reactions to their own experiences, willingness to seek needed help, openness to experience, and an awareness of themselves as socially competent persons.

Teachers using the Language Experience Approach are daily implementing the thinking of Rogers as expressed in the 1962 A.S.C.D. Yearbook, Perceiving, Behaving, Becoming:

"A fully functioning person is a creative person. With his sensitive openness to his world, and his trust of his own ability to form new relationships with his environment, he is the type of person from whom creative products and creative living emerge."

Teachers using the Language Experience Approach provide equal opportunity for children to express convergent and divergent responses. Historically, convergent responses have played a major role in the child's life at school. That is teachers have stressed answers to questions such as who, when, where, and which. Such questions have one correct answer.

Who did it?
When did it occur?
Where did it happen?
Which is the larger?
What is the major export?

In the reading program most workbooks and worksheets demand "someone else's answers to someone else's questions".

The teacher using the Language Experience Approach provides equal opportunity for divergent responses. That is children are encouraged to respond to questions such as why and how.

Why did it happen?
Why did he do it?
How did he feel?
What might have happened if-----?

Such questions have no one correct answer and the correctness of the answer is often determined by the experience background of the respondent.

The Language Experience Approach is not unique in its concern for maintaining a balance between convergent and divergent responses to questions and experiences. The structural grammarian is stressing description of the language rather than prescription. Science teachers are stressing the use of the scientific method as a way of discovering truth. Mathematics writers are suggesting that children be helped to discover number relationships through observation. The Language Experience Approach helps children discover reading and writing through describing their own experiences. Teachers using this approach know that whatever children have experienced they can think about. That which they can think about they can talk about. Teachers help each child discover that whatever he can talk about can be written and read by the child himself and others.

Creative activities which demand unique personal reaction to experience are a vital part of the Language Experience Approach because:

1. They help the learner clarify his view of his environment.
2. They help the child reorganize experience to solve problems.
3. They develop appreciation for the unique experience of others.
4. They develop self-confidence and self-adjustment.

5. They extend the child's experience background.

6. They give the teacher insight to the needs, interests, and abilities of children.

Teachers using the Language Experience Approach promote creativity, reading skill, and total language growth through:

1. Providing each child with a rich experience background.

2. Showing each child that he is valued, respected, and trusted.

3. Providing children with maximum opportunities for choice.

4. Avoiding competition between children which results in children selecting only those activities likely to be rewarded.

5. Respecting, valuing, and encouraging the unique differences among children.

6. Selecting the best methods of teaching to enable each teacher to work most effectively within their own competencies and the needs of children.

7. Providing flexibility in daily scheduling.

8. Placing high value on all creative effort of children.

As can be readily seen, creativity and creative activities are a vital part of the Language Experience Approach. Teachers who value the unique differences of children, and who see their task as that of helping children discover the wonderful world of language, will explore the values of the Language Experience Approach.

The Language Experience Approach. The Language Experience Approach is based on the following:

1. Each child can think about anything he has experienced.

2. What a child can think about he can talk about.

3. What a child can say can be written.

4. Anything which can be written can be read by the child himself and by others.

This simple formula combined with a teacher's respect for the unique differences of children provides the blueprint for the Language Experience Approach. Using this guideline, it is possible to chart the kinds of experience a child might have as he progresses through the elementary school.

Beginning in kindergarten and continuing through grade six each child will have many opportunities to: experience - think - talk - dictate - write and read. The emphasis is on the togetherness of language development and reading is not isolated from the other language uses: listening, speaking and writing. Listening and reading are viewed as intake activities which together with experience form the basis for the expressive activities, talking and writing. This togetherness of skill development makes possible the use of each child's unique language background and experience as he grows toward maturity.

Kindergarten. As early as the first day in the kindergarten each child is encouraged to express his unique reaction to experience. Such expression may be oral as he shares objects or experiences, graphic as he paints or colors, or three dimensional as he manipulates blocks, clay, or other objects. Children are encouraged to share their thoughts with others and the teacher's role is to encourage and provide the needed time for such expression.

A few children who have thought through their ideas and wish to have them recorded are encouraged to dictate sentences describing their pictures. The teacher records these stories in the child's own words, using a felt pen and large manuscript letters, as other children watch. Long and involved stories are summarized by the child himself before recording. The recorded sentences are then pasted on the bottom of each child's picture. Each day the teacher reads aloud a few of the previously recorded stories as children observe the picture and printed symbols. Through personal experiences children learn that, "Reading is just talk written down."

In addition to reading orally children's stories, teachers read aloud each day material written by adult authors for children. This activity extends the experience background of children as well as helping children identify with printed material written by adults for them.

The kindergarten program has as a major goal extending the experience backgound of children. Study trips, films, interest centers, resource persons, pictures, tackboard displays, exhibits all are used to provide experiences which encourage thinking, talking, and dictating.

As kindergarten children mature in their language development they are encouraged to reach generalizations regarding the use of printed symbols. They are led to make the transfer from concrete experience to graphic representation to the most abstract printed word.

Toward the middle of the kindergarten year teachers begin pointing out a few of the mechanics of written language as they record the dictated stories of individual children. Capitalization, end of sentence punctuation, and complete sentences are discussed. Children wishing to do so and who have the necessary language maturity are encouraged to read their own stories to the group. By the end of the kindergarten year many children are able to read their own stories, some are able to read stories written by other children, but of greater importance, all children are eager to experience think-talk-and dictate. Most children feel a sense of adequacy in the use of language and a keen interest in writing and reading. Most children have developed a concept of themselves as capable of dealing effectively with their school experiences.

Primary Grades. Children entering grade one, who have spent their kindergarten year engaged in the activities described above, have had many opportunities to experience think, talk, and dictate. Many children will have developed considerable skill in reading and a few will be able to write.

First grade teachers continue to extend the experience background of children through study trips, films, interest centers, resource persons, pictures, tackboard displays, and exhibits. Children continue to picture their experiences and dictate their accompanying stories. Teachers continue to record children's thinking with felt pen or crayon and attach the written manuscript to children's pictures.

In grade one, however, the teacher takes children's dictation in small groups of ten to twelve while the rest of the class engages in a variety of activities designed to extend or interpret experience background. During dictation the teacher helps children make discriminating responses in regard to subject matter, choice of vocabulary, sentence structure and the symbols of the language. Each child is encouraged to recall the words used in his own dictated stories and thus develop an initial sight vocabulary.

As each child dictates experiences to accompany a completed picture, the teacher helps the group of ten to twelve children discover words which begin alike, words which end alike, and words which are alike. Children are developing those skills necessary for independent writing and reading as they describe their own reactions to experience.

Early in grade one some child will express the wish to write his own story. As this occurs the teacher encourages the child and provides needed help. In the beginning the teacher writes the story as the child dictates. The child then copies the teacher's writing. The first child's independent writing provides motivation for many children to want to write for themselves.

As soon as several children choose to write their own stories a group is formed. Here children, who have thought through the ideas they wish to express, come together to get needed help from their teacher and other children. Individual children share their ideas with the group often with a picture they have completed which illustrates their story. The child himself, the teacher, or other children suggest words with which he will need help in order to write his story. Needed words are written on the chalkboard by the teacher after she has encouraged the child to contribute as much help as he is able. This demands that the teacher be aware of each child's capabilities and limitations. This activity must move swiftly and children are not asked to contribute to writing words beyond their level of understanding. Whereas some children contribute only initial consonants, others contribute syllables while others discover they can already write the entire word. No word is listed on the chalkboard if the child needing the word is able to write it or is aware of another ready source for the word.

As soon as the group of eight to ten children have had an opportunity to identify needed words, and these have been listed on the chalkboard, children are asked to look at the words and tell what they see of interest to them. Generalizations of less mature children may be limited to observations such as, "Many and mother both begin with 'm'." A more mature child might note, "If you took the 'y' off city and put 'ies' you would have cities."

Before children return to their seats to write their own stories each child is asked to identify the words on the board which he has requested. A check mark is placed by any word which is unidentified by the child who requested it. After a second attempt to identify a word, if the child still does not know it, the unknown word is erased. This places the responsibility for securing needed words on the child and not on the teacher. Once children leave the group and return to their seats no further help is given by the teacher.

While the teacher is working with one child or a small group, other children are engaged in a variety of activities designed to extend their experiences. These activities include: manipulating materials at a science table, painting, modeling with clay, building with blocks, reading books (written by children, brought from home, or obtained from the school library), etc.

As children gain increased interest, maturity, and skill in reading and writing, the teacher and children develop many resources for locating needed words. These materials include: high frequency word lists, word lists of common interest, word lists on one topic, picture dictionaries, children's written material, library books in the classroom, interest centers, and tackboard displays.

The teacher takes advantage of the self-motivation inherent in independent writing to assure mastery of the words most frequently used in reading and writing. The incomplete sentence, which the child completes in his own unique way, is used to stimulate writing and reading. Such sentences as, "This summer I ----, My favorite pet is ----, I would like to ----, When I grow up I want to ----" demand unique divergent responses as there is no one correct answer. These responses bound into a class book make interesting reading for all children and provide a valuable tool in developing a basic sight vocabulary.

As soon as first grade children have mastered the basic vocabulary of simple adult prepared books, these books are read for information and/or enjoyment. Children do not read books primarily to improve reading skills. Phonics and other word attack skills are taught as part of the writing program rather than interrupting the reading thought to teach these skills. Phonics instruction in the Language Experience Approach begins with the oral expression of children - not with someone else's unfamiliar printed symbols.

As teachers provide needed help for children they discover problems which are common to several children. When these are identified, groups are established to meet specific needs. As soon as such needs have been met these groups are dissolved and new groups are formed. No child is ever placed in a low or fast group as no such group exists.

By the end of grade one children have had many opportunities to: experience, think, talk, write and read. Because the only limits placed on learning have been the experience background, maturity, and ability of each child, there is a wide range in ability among children.

In grades two and three teachers using the Language Experience Approach continue to provide opportunities for children to experience think, talk, dictate, write and read. Many children in the primary grades will have far exceeded the usual expectancies in spelling, handwriting, reading and writing, though some children may yet be dictating their stories to the teacher.

A wide variety of printed materials is provided for self-selection by pupils based on their own needs and interests. Books and other publications are read for information and/or enjoyment. Printed materials provide extension of experience background and models of excellence in style and form.

Children meet in small heterogeneous groups with their teacher to develop style, form, vocabulary, and word attack skills needed in their own writing.

Each day the teacher reads aloud stories representing good literary style to help children derive appreciation for the skills of other authors and to provide stimulation for children's efforts.

Each day children are encouraged to express their thoughts in writing. Resources are developed by children and teacher to provide words needed in daily writing. Samples of these resources include: books written by classmates, tackboard displays, picture dictionaries (commercial and pupil-prepared), notebooks containing two or three hundred high frequency words, boxes containing word cards arranged in alphabetical order, as well as daily help by other children and the teacher.

The teacher provides words needed by individual children but her goal is to help children become independent writers through their unique expression of their own experiences. Therefore, the teacher is sensitive to the competencies of individual children and does not provide help if the child is able to meet his own needs.

Children who experience similar difficulties meet with the teacher in small temporary groups formed to accomplish specific purposes. These small groups may help children develop increased ability in: word recognition, comprehension, organization of ideas, interpretation of ideas, or location of information.

In the Language Experience Approach, primary teachers utilize a variety of techniques to evaluate the language growth of children. Curriculum guides on language and reading, language arts texts, and basal reading text manuals, all provide guidance for the teacher both in assessing skill growth and in suggesting appropriate activities for children. Skill achievement is measured by standardized tests, answer strip or quick check tests, as well as the teacher's recognition of the child's progress in total language expression and development.

In addition to the evaluation of skill growth the teacher is equally concerned with the attitudes the child is developing toward language arts and toward himself as a person. Surveys of attitudes, personal observation, discussion, and the child's daily written expression all are used to assess the effects of language activities on the child's concept of self and language arts.

Intermediate Grades. Teachers using the Language Experience Approach to Reading with children in grades four, five, and six, continue to provide many and varied opportunities to: experience, think, talk, write and read. As in the primary grades, reading is not taught in a reading circle with a single text serving as the basis for the reading program and children do not read "reading" or readers for a major portion of the reading instruction time. Teachers continue to place equal emphasis on helping children improve their own language competency as they place on training children to use other people's language.

The teacher in the intermediate grades continues to capitalize on the many significant uses of oral and written language which are inherent parts of the child's daily life at home and school. These functional and expressive uses of language form the basis for total language development and thus also form the basis for reading instruction.

Throughout the school day, the teacher is alert to those situations which require oral and written language. The teacher not only provides the necessary time but encourages the use of oral language in: discussion, conversation, interrogation, listening, audience speaking, dramatization, unison speaking, and dictating. The teacher is alert to and capitalizes on those functional and expressive situations requiring written use of language such as: developing lists, announcements, reports, directions or explanations, descriptions, correspondence and subjective writing.

As children use oral and written language in situations important to them, both the children and their teacher identify areas which can be improved. Based on needs identified through the functional use of language, not on a pre-conceived notion of what should be done to children, teachers group children for specific instruction.

Motivation in the Language Experience Approach derives, in part, from the child's enthusiasm to express his unique personal response to his own experience, expressed in his own language. Therefore, each day opportunities for subjective or personal writing are provided. The intermediate grades teacher encourages personal writing through:

1. Providing a classroom environment in which a wholesome, supportive relationship exists between the teacher and children and among the children themselves.

2. Providing flexibility in daily scheduling which permits freedom from continuous pressures of time.

3. Showing an interest in and respect for the creative efforts of children.

4. Sharing appropriate literature with children.

5. Providing children with many and varied experiences throughout the entire school day.

6. Providing many opportunities for telling experiences before writing.

7. Correcting creative writing only when the child is present and the material is preserved.

8. Encouraging children to share their creative efforts with others unless this is contrary to the wishes of the writer.

In considering classroom organization, many primary and intermediate teachers favor heterogeneity in much grouping to extend experience background and to encourage wider thinking and expression. Instruction is given on an individual, small or large group basis according to the needs of children in the class.

Materials used by teachers in the intermediate grades, as in the primary, include all published materials written for children. Magazines, newspapers, textbooks, and trade books are all available. The use of these materials differs from other reading approaches in that children read published items for recreation and/or information and not, primarily, to improve reading skill. Children's own writing is as highly valued as materials written for children and both are made available for reading.

Skill instruction through grade six continues to be based on the individual needs of children as identified by the teacher as she observes the child's total language development. The presentation of phonetic, word analysis, and comprehension skills continues to rely heavily on discussion of children's writing.

The intermediate grades teacher continues to use a wide variety of techniques to evaluate pupil growth. Achievement is measured by standardized tests, answer-strip or quick-check tests, and by the teacher's observation of the child's growing ability to express his thoughts orally and in writing. Conferences, teacher observation, attitude inventories, and an appraisal of individual writing all are used to gain insight concerning the attitudes and reading progress of children.

An Overview. Teachers, curriculum workers, and administrators, searching for improved methods to help children gain increased language competency, have developed the Language Experience Approach to Reading. This approach involves more than a method or technique. It is a way of thinking about children, language, and the teacher's role in elevating both children's concepts of themselves and language.

1. What I have experienced I can think about.

2. What I can think about I can talk about.

3. What I can say I can write.

4. What I can write I can read.

5. I can read what other people have written.

This brief formula finds expression in the Language Experience Approach to Reading.

During the past few years the Language Experience Approach has evolved from a concept held by a few dedicated teachers to a clearly defined and highly effective language program for children. Teachers who have adopted this approach state they are more enthusiastic about teaching, more effective in meeting the individual needs of children, and more creative in their teaching. For children the Language Experience Approach to Reading has opened wide the exciting world of language. Conclusive evidence indicates children's rapid growth in all language areas. Not only are children able to use language effectively, they are highly motivated to read and write and they are eager to share their information and their unique reactions to experiences. Children see a real need to extend their language competencies and they accept personal responsibility for self-improvement. Children see themselves as competent persons able to deal effectively with language, school, and life.

IMPROVEMENT OF PERSONNEL UTILIZATION

By M. Delbert Lobb[1]

Apparently it takes a major jolt to force educators to use available knowledge and do the things they know how to do instead of operating at half efficiency in terms of up-to-date information. There is no justification for the typical, long time-lag between the discovery of new methods and materials and the diffusion of their application throughout the profession. Teachers must assess and accept such procedures more readily. This, of course, is more easily done if a teacher has the moral support of others who are close associates, as in a team teaching situation.

There is a need to accept research as a standard procedure in American schools. Every classroom should be a testing ground for educational psychology in action. Involvement of teachers in solving critical problems in education can be one of the greatest motivating factors for the improvement of instruction. Actual participation in research hastens the discovery of answers; but even more important, it drastically reduces the time required to place these answers into productive educational practice. This in no way replaces the laboratory and technical studies which must continue, but it can bridge the gap between the science of education and the artistry of the teacher.

A factor which impedes the initiation of team teaching in some schools is the feeling that a teacher must be a completely independent agent. This view is invited by the person who is not at all confident of his ability as well as the one who honestly believes that he is shackled by too close association with anyone else. There is little reason to believe that the teacher can ever be truly independent unless he performs as a private tutor. When he joins a school staff or becomes a part of a district, he immediately accepts certain restrictions resulting from organizational needs. This is another case of the age-old conflict between individual liberty and social responsibility. In any event, there are better ways to demonstrate an independent spirit than refusing joint commitment with others in a mutual task. It is probably true that anyone who is capable of working effectively with students has the necessary qualities to establish a successful relationship with other teachers on a team. Another aspect of this so-called independence is represented by the statement that teaching is a personal thing. Although learning is personal and individual, there is no reason to believe that teaching is necessarily or entirely intimate. Furthermore, the isolation of a teacher with his class does not insure this kind of relationship. To whatever extent the personal identification and affinity of a student with a teacher have motivational value, they can be assured as well in team teaching as in traditional.

[1] M. Delbert Lobb, Assistant Superintendent, Fremont (California) Unified School District

Often statements are made which attempt to place rather strict limitations on the applicability of team teaching. The weakness of such a position is demonstrated by actual practice. By definition, team teaching is limited only by the requirements that two or more persons be committed to carrying out the teaching function. Patterns and procedures of team teaching can be successful at every school level, including elementary, secondary, and college. The logical approach is the adaptation of various aspects of team teaching to the maturity of the students, not the forced adjustment of students to the specific application of team teaching. It is probably not much more difficult for small children to accept a team than a single teacher. As long as the members of a team do not show conflicts of interest or do not vie for the favor of young people, the situation will be quite workable. It can be said then that the maturity of the teachers is far more important than the maturity of the students. Little has been done with teams at the primary level, but it is likely they could be just as successful there as they have been at the intermediate and higher levels. Typical of the strange attitude about what students will accept is the range of feelings expressed about ninth-graders. If they are in a junior-high school, it is not uncommon to hear teachers say that seventh-graders are not mature enough to be involved in team teaching, but ninth-graders can accept it readily. At the same time, in four-year high schools, the comment can be heard that upper classmen fit into these activities very well, but ninth-graders are not old enough to be in team teaching. Underselling youth is the great national pastime.

What about the size of schools? Obviously, at the secondary level, if a school is large enough to have multiple sections of the same classes, this does provide easy entry into team teaching. The same is true where intermediate grades are departmentalized. Also, it is easy to initiate team teaching in an elementary school if there are several classes at the same grade level. However, the size of the school is not nearly as important as the attitude of the staff. Wherever staff utilization rationale takes on meaning for teachers, they will find means of organizing to derive its values. This may mean crossing grade levels or subject areas. In these cases, it even has the advantage of erasing arbitrary lines which thwart integration of learning.

With regard to subject areas, team teaching is applicable to every discipline. The uninitiated are apt to say that staff utilization is an excellent approach for someone else's subject. It is apparent from experience in every subject that the hope of better utilization of talent can be realized in one as well as another. The same difficulties mentioned in relation to school levels apply here. From an economical point of view, adequate numbers of pupils must be available to justify teacher assignment. It should be emphasized that interdisciplinary combinations offer a real opportunity. The combinations which come to mind first are English and Social Studies, Math and Science, and the Arts. However, it is possible for any two teachers who have the desire to do so to correlate different subject areas for a particular group of students.

All kinds of teachers can be members of teams. Team teaching has no more applicability for old teachers than young, experienced than new, men than women. In fact, no one can exclude himself. If a teacher has the emotional maturity required to stay in the profession, he has the essential qualification to become an effective team member. Professional compatibility comes more slowly for some than others, and it surely can never be taken for granted. Other things being equal, it is good to have a congenial team; however, much more important is an adult operable relationship. Students are the benefactors when teachers have varied backgrounds, viewpoints, and personalities; so differences are no deterrent.

The question is frequently raised about the applicability of team teaching to various ability groups. There is no reason to exclude any ability group. Whatever the nature of the group, the organization and activities must be considered in the light of an analysis of the ability of individuals. The flexibility of team teaching makes it possible to accommodate individual differences more readily and satisfactorily than in the traditional homogeneous groups. Large groups have generally been found to provide good settings for introduction, motivation, evaluation, and generalization, regardless of the ability level.

To say the least, then, team teaching has broad applicability. It is suited to almost any kind of situation and person.

Team teaching is the direction of learning activities by two or more persons in committed association. Obviously, a team refers to more than one person; so the important point here is the commitment to cooperation. This requires more than an informal or occasional involvement of two teachers who happen to have coincident plans. There must be the assumption of a continuing joint responsiblity for the instruction of a particular group of students. With regard to the "teaching part" of the definition, maximum attainment of the potential value of team teaching (or, for that matter, any other kind) can be reached only if the teachers are seen as directors of learning rather than purveyors of facts. This calls for planning and utilization of many kinds of situations, personnel, and materials.

In order to understand team teaching, it is necessary to see it in the light of evolving modern philosophy and procedures in education. A number of pressures and influences are related. As mentioned before, educators have pretty well made the case for quantity of education; that is, education for all youth through the high school and possibly junior college. Nevertheless, increasing enrollments make the problem of quantity persistent. It is possible that these gains may be diminished unless proper attention can be given to the needs of individual students. In spite of this, the great challenge today is the improvement of the quality of the educational experience for all. Essentially the first step is facilitating the application of philosophical, psychological, and sociological principles already known. Educators have not adequately used present knowledge. One of the real pressures, then, within the profession is the need to accumulate, analyze,

and utilize educational processes which are most promising. Also, within the ranks of educators there is a growing demand for insistence upon competence, as the group struggles for professional status. This can be partly accomplished through improved training, but more importantly it will come about through a complete examination and readjustment of the assignment of personnel to appropriate functions and combinations of activities. This requires accurate descriptions of the teaching task and sub-tasks.

When contemplating new procedures, educators should develop a rationale. This serves to give initial direction to the effort and provides a logical basis for decisions. The rationale should include the best thinking of as many as possible of the persons who will be involved. It is subject to continual re-examination, revision, and reinforcement.

The only justifiable basic premise is the improvement of the quality of education. This is expected from the improvement of the effectiveness of instruction resulting from better utilization of staff. This is done by providing the opportunity for personnel to make the best possible use of professional skill and time. Closely associated is more efficient use of materiel resources which enhance the instructional process. The teaching function must be carefully analyzed by all those who are involved. Then an organizational pattern is designed with enough flexibility to carry out the tasks and adapt to changing needs and individual requirements.

Team teaching becomes a means to the end of improved educational opportunities. It involves teachers more completely in the solution of critical problems and provides great motivation for the betterment of teaching. Actual participation in decisions hastens the discovery of solutions; and, perhaps even more important, it reduces the time required to place these answers into productive educational practice.

The philosophy of the district will govern the selection of teams and the structure of the groups. It is well not to be too impressed with the present notion of the shortage of competent teachers--not that it doesn't exist, but because this takes on the aspect of hopelessness. In establishing a rationale, the view that the competencies of master teachers should be spread over a broad area of influence is neither as functional nor as optimistic as the approach which relies on upgrading the capabilities of all individuals and providing incentive and occasion for professional interaction.

A workable rationale for team teaching demands its orientation to a learning viewpoint. Teaching becomes the direction of learning rather than just the transmission of knowledge. This requires increased awareness about how learning occurs, so suitable groups and activities can be set up to insure it. Outmoded procedures are more easily discarded if they seem to relate to needs of learners instead of the skill of teachers. This also places greater responsibility on the student, which individualizes instruction. In the final analysis, it also makes greater demands on the ability of the teacher. Such demands are more easily met by the range of talents of a teaching team.

Other considerations are the relationships between team teaching and the curriculum. Ordinarily there is a continual interaction among teachers, pupils, and curriculum, in its broadest sense. In addition there are various interrelationships between these factors. Teachers interact with curriculum without the direct participation of pupils; this is what occurs in planning, preparation, and personal and professional improvements. Pupils interact with curriculum without direct supervision of teachers; this is independent study or research. Teachers interact with pupils; although technically a part of the curriculum, this is an interpersonal relationship which might be termed guidance. In any event, team teaching allows greater scope in these relationships.

The keystone in a rationale for team teaching is the belief that the total contribution and accomplishment of the group can be greater than just the sum of the talents of the individual teachers. The term for this is synergy. It is an expression of the hope of those who participate in team teaching, that the cooperative endeavor will achieve greater results than isolated individual efforts.

Any attempt to set forth a single model for team teaching would be foolhardy. Moreover, there are risks in describing representative patterns if they are assumed to be all inclusive. When a school contemplates team teaching, the approach should be to take as broad a view as possible. This is not as difficult as it seems because there are certain considerations and elements which constitute guideposts.

The philosophy of the school is, of course, one of the prime factors in analyzing and formulating patterns. The organization of the team must be in harmony with that of the school. If line and staff organization is clearcut and tightly structured in the school, a hierarchal team may be quite suitable. It may be possible even to award additional compensation for certain tasks or responsibilities, if this is in keeping with the salary schedule and philosophy. On the other hand, if the school is organized in a more informal manner, these elements may be entirely unacceptable; and the interrelationships of the members of the team should be more casual. Central authority and delegation of responsibilities require different team structure than decentralized authority and self-directing departments or units. This is to say that teams can be effective, either in autocratic or democratic situations, as long as they are compatible with their particular settings. It might be said, however, that the pressures of such power and energy centers tend to make administration somewhat uncomfortable if it is too autocratic.

Another area of elements relates to functions. These include the specialization and diversity of teaching tasks and depend somewhat upon available personnel. Usually the first question is how to take care of routine clerical tasks. As in the case of most educational questions, the answer is partly financial. It will consist of the addition of personnel or redeployment or both. The selection of the type of auxiliary personnel should be quite specific to the team. One situation may call

for paraprofessional, instructional assistant, or intern; another for secretary, clerk, or teacher aide; while still another for community consultant or student consultant; or combinations of any or all of these. The utilization of resource personnel will depend to a considerable extent on the relationship between the school and community. In regard to functional elements, most thought should be given to the variety of professional tasks. A school must decide to what extent teachers should share all tasks or parcel them out. Such factors as the interests and competencies of teachers must be taken into account. A good procedure is to outline the various functions and prepare job descriptions related to content, activities, and group size and composition. Caution should be used not to overspecialize and lose flexibility and resiliency in the team.

Another element in formulating patterns is that of size or numbers. With regard to the team, by definition there must be two or more persons involved. Experience seems to show that the optimum number on a team is somewhere between three and six, although teams of two have been highly successful and some including 12 individuals have worked well. With regard to the numbers of students, the two over-riding considerations are appropriate activities and facilities. In schools built to house mostly groups of 30, patterns are somewhat restricted in taking care of individuals, small groups, and large groups. Every effort must be made to accommodate varying numbers of students; modification of present buildings and future plants is essential. At the same time those engaged in planning for team teaching must take a realistic view of this element of patterns and perhaps make some compromises regarding numbers.

Structural elements are another important aspect of the composition of team patterns. They may be categorized as vertical and horizontal structural elements. The vertical elements are those of progression which relate to the movement of the student through the entire range of school experience from entrance to graduation. Several possibilities exist for team structure. It may be designed on an intragrade basis which includes teachers, students, and curriculum normally assigned to that grade level. Another possibility is an intergrade arrangement which includes persons in curriculum identified with two or more grade levels which still retain their identity. Still another possibility is a non-graded pattern which endeavors to permit students to progress in a relatively unbroken manner. The vertical aspect of structure constitutes only one dimension and must be combined with one or more horizontal aspects. This in itself produces a multitude of combinations which can be selected. The horizontal dimension provides diversity of structure. It includes a number of ways of assigning teachers, pupils, and curriculum, according to subjects, functions, or groupings. A design limited to one subject area is termed an intrasubject structure. This, too, can be conceived on either a broad or restricted basis for a discipline or sub-disciplines. Intersubject structure refers to the combination of two or more subject areas which retain their identity even though integrated. A non-subject structure refers to all other designs related to subject matter; this would include the complete fusion of several subject areas into a new curriculum based on something other than subject, such as problems or themes; another example is multiple teaching of self-contained classrooms. In addition to subject

classifications, there is the possibility of interfunctional team patterns which combine teaching classifications with others, such as guidance, library services, business functions, or health services. Other possibilities are related to the nature of the grouping of students, whether it be at random or on the basis of some similarity in ability, interest, need, or other factors. It is apparent that all of these horizontal elements are not mutually exclusive. Also, other elements of design may occur in individual situations.

In any event, there should be a careful analysis of these elements which go into developing patterns as they relate to a specific school. Emphasis should not be on locating someone else's pattern to adopt but rather on constructing those designs which are suitable for the local situation in terms of philosophical, functional, environmental, and structural elements.

In the final analysis, the only sure way to evaluate team teaching is to try it. The bulk of evidence points out that there is little risk of losing educational ground. Logic indicates that team teaching has immense potential waiting to be more fully exploited.

It was a workshop - - - -

It was a busy workshop - - - -

It was a busy workshop

where we worked - - - -